PECULIARITIES OF MILITARY OFFICERS’ PHYSICAL PERFECTION DURING TROOPS’ BEING IN CONDITIONS OF POSITIONAL DEFENSE

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Abstract. **Purpose**: to determine demand and opportunities of military officers’ physical perfection in conditions of positional defense. **Material**: in research personnel of companies’ strong points (n = 32), scouts (n = 26), drivers of military automobile transport (n = 23) participated. **Results**: it was found that 64% of mobilized military officers prefer to practice physical perfection in period of fighting capability’s restoration. Only 27% had desire to physically train. 16% practice physical training. 13% of personnel practice physical training from time to time. We found insufficient level of military officers’ applied skills. It was determined that key factor in formation of military officers’ demand in physical perfection was their inner motivation, based on own experience of sports trainings. **Conclusions**: Troops’ being in conditions of positional defense for long time is not an obstacle for realization of military officers’ demand in physical perfection. Character of military officers’ functioning in zone of conflict permits to organize systemic process of physical training by means of fulfillment of power oriented physical exercises and improvement of some applied skills. **Key words**: defense, applied skills, power abilities, training, physical fitness.

Introduction
Theory of physical training (PT) in troops completely describes organization of military officers’ physical perfection in time of peace. In conditions of special period PT organization remains out of attention of military authorities and requires solution. The mentioned problem causes justified interest of commanders, PT specialists, and scientists [1–7]. In publications from combat zone (CZ) physical training is given as mean of organization of military officers’ leisure and maintaining them in proper condition [8–10].

Domestic specialists actively analyze experience of operations in conflict zone (ATO), study PT potential for ensuring personal safety of military officers [11], give offers on maintaining of military officers’ proper physical fitness, improvement of their applied skills [12]. It is stressed that it is purposeful to physically perfect military officers with means of gymnastic and athletics, as well as with hand combat means [13]. Alongside with traditional means of physical perfection it is recommended to use non traditional: breathing gymnastic, Khadu gymnastic, Yoga and etc. [14, pg. 65]. To day’s realities require studying and analysis of situation, working out of definite, substantiated offers on organization of military officers’ physical perfection in conditions of special period.

Purpose, tasks of the work, material and methods
The purpose of the work is to determine demand and opportunities of military officers’ physical perfection in conditions of positional defense.

- For achievement of our purpose we used the following methods: analysis of normative documents, which regulate military officers’ professional functioning in ATO zone;
- Analysis of scientific and internet sources;
- Observation over professional functioning of military officers of scouts’ company, of mechanized battalion from contact line of the parties, drivers of military automobile transport;
- Questioning of combat units’ commanders, military officers, having combat experience;
- Stating experiment for determination of formation of military officers’ applied skills.

Diagnostic of military officers’ loads was fulfilled by their subjective feelings and assessed with 12 points’ scale of Borg [15]. The research was conducted in summer time in passive phase of conflict. It was the period of holding of front positions at contact line of parties by units of mechanized brigade in conditions of positional defense.

Results of the research
Construction of ATO defense system envisages involvement of significant part of personnel for servicing at strong points (SP). Main elements of military officers’ professional functioning are: continuous observation over assigned for defense sector; determination of targets and their shooting in case of attack on SP; engineering perfection
of SP positions; measures on solution of everyday problems; maneuvering on SP position in case of gunning; fire; reloading of weapons. Variability and unpredicted character of enemy’s actions create unstable rhythm of motor functioning of SP personnel. It does not permit to work out algorithm of their professional functioning. Hours of silence can immediately be changed with periods of fire confrontation. Provocation fire forces fighters to immediately take combat positions and it requires coordination skills. In period of defensive fight (most frequently in dark time) military officers shall bear combat equipment of over 24 kg weight. They move on short distances (up to 40 meters) in trenches and communications of strong point in bent position and with arms. Intensity of military officers’ load during servicing on SP varies from 12 to 16 points. In fighters’ opinion the main factors of their fighting capability’s weakening in period of being on SP are: moral-psychological influence of situation; muscular fatigue from combat equipment; unusual methods of moving; long being in position for shooting.

Period of duty on SP is changed by equal by duration period of rest. During rest period personnel recreate fighting capability and prepare for next duty. Physical loads of personnel during rest are determined by character of everyday problems to be solved. They are usually of moderate intensity.

Functioning of scouts is of more intensive character (13–17 points). By results of scouts’ questioning (n = 26) we formed rating of importance of kinds of their training for successful professional functioning (see fig.1).

![Fig. 1. Rating of importance of kinds of scouts’ training (by weight coefficient value, \( \kappa \)), where:
1 – moral-psychological training; 2 – tactical-special training; 3 – fire training; 4 – engineering-sapper training; 5 – military topography; 6 – physical training; 7 – other kinds of training; \( w = 0.76 \)](image)

Moral-psychological training is the basis of successful realization of tactical-special and fire trainings. In respondents’ opinion it is based on mastered previously practical professional skills, abilities, confidence of scouts group’s fighters in each other and concordance in actions. Insufficient rating of physical training is conditioned by character of tasks, which scouts fulfilled in conditions of positional defense. 84% of the questioned think that success of combat task’s fulfillment depends on quickness, stealth, noiseless of actions; ability to immediately and adequately respond to change of situation. Among the most demanded physical qualities scouts call general, power and static endurance, dexterity. The most important motor skills they consider ability to overcome obstacles, moving by different means (secret, squatting, on bellies, defense with equipment and arms).

Professional functioning of automobile transport drivers is of low intensity. Most of transportations are realized in daytime that permits for drivers to fulfill professional duties in ordinary mode and do not break organism’s physiological rhythm. Checks out the rout are followed by increased nervous-psychological tension, load on organs of hearing and eyesight because of high probability of attack on transport mean (blasting, ambush, gunning). Besides,
driving for long time in extreme conditions and means of individual protection causes pain in backbone, numbness of lower limbs. Fulfillment of even insignificant repair, adjustment of automobile’s systems (mechanisms) requires proper power abilities and flexibility. Most of drivers (n = 23, 61%) understand usefulness of physical perfection for improvement of professional workability. Only 13% of them fulfill physical exercises for this purpose.

Characteristics of professional functioning of the tested categories of military officers permit to speak about importance of physical fitness component in structure of their fighting capability. Content of this concept envisages military officers’ ability to demonstrate military applied motor skills, which they shall acquire before their going to ATO zone. The level of their skills was tested in stating experiment. Military officers were reminded technique of fulfillment of some physical exercises. Then they were offered to fulfill these exercises from the first attempt. For unification of the process we used 4 points’ scale (see fig.2).

Fig.2. Relative indicators of applied motor skills formation in military officers (n = 32), where:
% - Percentage of military officers, who fulfilled exercise; A – exercise: throw of grenade with ammunition; B – exercise: overcoming of wall of 1.1 meters with ammunition; C – exercise: self-insurance when falling on back; D – mean indicator of applied skills’ formation.
Assessment of exercise’s fulfillment: 4 – exercise is fulfilled properly, without mistakes, easily; 3 - exercise is fulfilled properly, but with insignificant mistakes; 2 – exercise is fulfilled properly, but with rough mistakes; 1 – exercise is fulfilled wrongly.

Criteria of assessment were space-time and qualitative (accuracy of movements, economic character of them and energy).Results of experiment point at low level of important military applied skills’ formation in mobilized military officers, especially in cases, where steady motor stereotype is required. We researched possibilities of correction of military officers’ physical condition and organization of physical trainings in ATO zone. Besides, we considered conditions of military officers’ training and importance of physical fitness component in structure of their fighting capability.

We questioned 76 military officers of age from 22 to 56 years. From them 87% were mobilized to MF of Ukraine, 72% – had experience of combat actions. Questioning results showed that physical fitness factor takes 4th place in rating of military officers’ fighting capability. 63% respondents confirmed that it was possible to conduct physical perfection trainings in zone of combat actions. Part of the questioned (44%) thinks it purposeful to practice physical perfection in period of recreation of fighting capability. 27% desired to practice trainings. 82% of them were sure that it is necessary to have organizer of such trainings or better – instructor. It should be noted that absence of normative documents on organization of PT in ATO zone is not an obstacle for military officers, who have inner demand in physical perfection. As per our observations 11–19% of military officers find time and opportunities for trainings. Nearly all of them had sports achievements in the past, sports grades and practice physical perfection with accent on own sports specialization. The tasks of own physical perfection are understood by fighters as maintaining of organism’s workability, physical condition, psychological release and formation of confidence in own abilities; enjoying of trainings.

Individual trainings are practiced in free from gunning and duties time. Choice of content of physical perfection depends on sports orientation of military officer, own bents, initiatives of sport active of the unit, environmental conditions and equipment of site for physical exercises. The most popular kinds of physical perfection
in ATO zone are power training (80%), sport games (16%), run (4%). Military officers use mainly simple in operation and production equipment: parallel bars, horizontal bars, weights, barbells, skipping ropes, punching bags. The equipment can be original and improvised, self-made.

Military officers note absence of commanders’ exactingness to physical fitness of the subordinates; absence of methodic advices on physical perfection and organized practical consultations. Such position of commanders does not facilitate personnel’s motivation for physical perfection and excludes this process from general system of maintaining of military officers’ individual fighting capability.

Discussion

Factor of physical fitness is one of determining in ensuring of individual fighting capability of military officers and influences significantly on effectiveness of their professional functioning [16, pg.283]. Influence of this factor is traditionally actualized in period of CA, on stages of direct personnel’s training for CA [17, 18] or when fulfilling tasks in extreme conditions [19, 20]. In existing conditions of military officers’ mobilization and their further training it is rather difficult to ensure their proper physical fitness. It was confirmed by results of stating experiment. However, research of structure and character of personnel’s professional functioning in durable conditions of positional defense confirmed specialists’ opinion about possibility of organization of physical perfection trainings in combat conditions [13]. Such opportunities are restricted by CA intensity, character of environment, weather and everyday conditions and so on.

We confirmed leading role of inner motivation of military officers for realization of their demand in physical perfection [21, 22]. Our research showed that it is necessary to create sites for motor functioning and appropriate methodic provisioning in places of military units’ location.

Conclusions

Content and character of military officers’ professional functioning in ATO zone in conditions of positional defense condition variation of their physical loads’ intensity from moderate to sub-maximal.

The fact that military shall be constantly in means of individual protection with full ammunition sets increased requirements to fitness of muscular skeletal apparatus of their organisms. Conditions of servicing in ATO zone in positional defense permit to organize individual trainings of power orientation and perfect some military applied motor skills.

Our further researches will be oriented on substantiation and working out of physical perfection programs for military officers of different age and professional groups.

Acknowledgement

The work has been fulfilled as per plan of scientific-research and scientific-technical activity in MF of Ukraine. Topic of SRW: “Substantiation of methods of survival and military officers’ actions in extreme conditions”, code – “Survival”.

Conflict of interests

The author declares that there is no conflict of interests.

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